UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,148	09/18/2000	Nathan F. Raciborski	19396-000400US	4248

7590	03/08/2004

Thomas D Franklin
Townsend and Townsend and Crew LLP
8th Floor
Two Embarcadero Center
San Francisco, CA 94111-3834

EXAMINER
PARTON, KEVIN S

ART UNIT	PAPER NUMBER
2153	15

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.		Applicant(s)	
Office Action Summary	09/664,148		RACIBORSKI ET AL.	
	Examiner		Art Unit	
	Kevin Parton		2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07 January 2004</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-24</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-24</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12, 13</u>.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claims have been considered but are moot in view

of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Knauerhase et al.

(USPN 6,345,303).

4.   Regarding claim 1, Knauerhase et al. (USPN 6,345,303) teach a system for increasing

transfer quality on a content distribution system, the distribution system comprising a requestor

and a selector with means for:

   a.   Determining a first transfer quality factor relating the requestor and a first

        source, the first source identified by a first identifier (column 6, lines 63-65;

        column 7, lines 3-8).

   b.   Determining a second transfer quality factor relating the requestor and a

        second source, the second source identified by a second identifier, wherein at

        least one of the first and second sources caches a content object that originates

elsewhere (column 6, lines 63-65; column 7, lines 3-8; column 3, line 65-column 4, line 4).

c. Providing a preference to the selector, wherein the preference is based on the first and second transfer quality factors, the preference comprising at least one of the first and second identifiers (figure 2; column 7, lines 27-33).

d. Automatically selecting one of the first source and the second source with the selector to supply the content object requested by the requestor, wherein the selecting step is based at least in part on the preference (figure 2; column 7, lines 27-33).

5.   Regarding claim 2, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 1. They further teach means for identifying the first and second sources (column 6, lines 63-65; column 7, lines 3-8).

6.   Regarding claim 3, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 1. They further teach means for providing the first and second identifiers to the requestor (column 6, lines 63-65; column 7, lines 3-8).

7.   Regarding claim 4, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 1. They further teach means wherein the determining a first quality factor includes performing a plurality of tests (column 7, lines 27-41).

8.   Regarding claim 5, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 4. They further teach means for using a weighting function to weight the plurality of tests to determine the first transfer quality factor (column 7, lines 27-41).

9.   Regarding claim 6, Knauerhase et al. (USPN 6,345,303) teach all the limitations as

applied to claim 5. They further teach means wherein the weighting function is defined by a user

(column 7, lines 27-41). Note that at some point, a user had to determine the selection criteria.

10.   Regarding claim 7, Knauerhase et al. (USPN 6,345,303) teach all the limitations as

applied to claim 1. They further teach means wherein the selected source is a transfer node,

wherein the transfer node comprises a content object dynamically transferred from an originating

source and made available to the requestor (column 7, lines 3-8, 39-41).

11.   Regarding claim 8, Knauerhase et al. (USPN 6,345,303) teach all the limitations as

applied to claim 1. They further teach means for displaying the preference to the user (column 7,

lines 27-41).

12.   Regarding claim 9, Knauerhase et al. (USPN 6,345,303) teach a system for allowing a

requestor to guide selection of a content object source with means for:

      a. Identifying a first and second source, wherein at least the first source being

         capable of requesting a content object from an originating source in response

         to an earlier request for the content object of the requestor (column 6, lines

         63-65; column 7, lines 3-8, 27-41; column 3, line 65 - column 4, line 4)

      b. Analyzing transfer quality between the requestor and the first source, and

         between the requestor and the second source (column 7, lines 27-41).

      c. Ranking the first and second sources based on the analyzed transfer qualities

         (column 6, lines 63-65; column 7, lines 3-8, 27-41; column 3, line 65-column

         4, line 4).

> d. Using the ranking to guide selection of the content object source, whereby the selected content object source is one of the first source, the second source, or a third source (column 7, lines 27-41).

13.   Regarding claim 10, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 9. They further teach means for transferring the ranking to a selector, the selector selecting the content object source partially based on the ranking, and the selector indicating the selected content object source to the requestor (figure 2; column 6, lines 63-65; column 7, lines 3-8, 27-41; column 3, line 65-column 4, line 4).

14.   Regarding claim 11, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 9. They further teach means wherein the analyzing transfer quality includes performing a plurality of tests (column 7, lines 27-41).

15.   Regarding claims 12, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claims 9, respectively. They further teach means wherein the analyzing transfer quality includes performing at least one of traceroute, test via file transfer, server health check, server load check, ping, path difference, BGP routing information, churn rate, or port response time (column 7, lines 27-41).

16.   Regarding claim 13, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 9. They further teach means for requesting a content object from the selected content object source and receiving the content object (column 7, lines 27-41).

17.   Regarding claim 14, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 13. They further teach means wherein the receiving the content object includes pre-fetching a portion of the content object (column 7, lines 27-41).

18.   Regarding claim 15, Knauerhase et al. (USPN 6,345,303) teach all the limitations as

applied to claim 13. they further teach means wherein the receiving the content object includes

at least one of: decompressing the content object, decrypting the content object, or performing a

security check of the content object (figure 2; column 6, lines 63-65; column 7, lines 3-8, 27-41;

column 3, line 65-column 4, line 4).

19.   Regarding claim 16, Knauerhase et al. (USPN 6,345,303) teach a system for selection of

a transfer node influenced by a client preference with means for:

      a. Identifying a first transfer node and a second transfer node to the client

         (column 6, lines 63-65; column 7, lines 3-8).

      b. Ranking the first and second transfer nodes by the client, the ranking forming

         a client preference and based at least in part on a storage capacity of the

         transfer node (column 6, lines 63-65; column 7, lines 3-8, 27-41; column 3,

         line 65-column 4, line 4).

      c. Selecting one of the first or second transfer nodes based on the client

         preference (column 6, lines 63-65; column 7, lines 3-8, 27-41; column 3, line

         65-column 4, line 4).

      d. Requesting transfer of a content object from the selected transfer node

         (column 6, lines 63-65; column 7, lines 3-8, 27-41; column 3, line 65-column

         4, line 4).

20.   Regarding claim 17, Knauerhase et al. (USPN 6,345,303) teach all the limitations as

applied to claim 16. They further teach means wherein the client preference is created by

analysis of a transfer quality between the client and the first transfer node and between the client and the second transfer node (column 7, lines 27-41).

21.   Regarding claim 18, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 17. They further teach means wherein the analysis of transfer quality includes performing at least two tests (column 7, lines 27-41).

22.   Regarding claim 19, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 16. They further teach means wherein the selected transfer node is the content object source (column 7, lines 27-41).

23.   Regarding claim 20, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 16. They further teach means wherein the selecting of one of the first or second transfer nodes is done by a third transfer node (column 6, lines 63-65; column 7, lines 3-8, 27-41; column 3, line 65-column 4, line 4).

24.   Regarding claim 21, Knauerhase et al. (USPN 6,345,303) teach all the limitations as applied to claim 1. They further teach means wherein the first transfer quality factor comprises an ability of the first source to receive a content object from an originator (column 7, lines 27-41).

Claim Rejections - 35 USC § 103

25.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

26.   Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knauerhase

et al. (USPN 6,345,303).

27.   Regarding claim 22, although the system disclosed by Knauerhase et al. (USPN

6,345,303) (as applied to claim 1) shows substantial features of the claimed invention, it fails to

disclose means wherein the first transfer quality factor comprises an average time a content

object will remain on the first source.

        Nonetheless, these features are well known in the art and it would have been an obvious

modification of the system disclosed by Knauerhase et al. (USPN 6,345,303).

        A person having ordinary skill in the art would have readily recognized the desirability

and advantages of modifying Knauerhase et al. (USPN 6,345,303) by employing the factor of

time that an object will remain on the server. This benefits the system by allowing sources to be

timed out if the requestor waits too long to access the source.

28.   Regarding claim 23, Knauerhase et al. (USPN 6,345,303) teach all the limitations as

applied to claim 9. They further teach means wherein the analyzing transfer quality includes

performing at least one of traceroute, test via file transfer, server health check, server load check,

ping, path difference, BGP routing information, churn rate, or port response time (column 6,

lines 63-65; column 7, lines 3-8, 27-41; column 3, line 65-column 4, line 4).

        Although the system disclosed by Knauerhase et al. (USPN 6,345,303) (as applied to

claim 16) shows substantial features of the claimed invention, it fails to disclose means wherein

analyzing transfer quality includes analyzing a churn rate.

        Nonetheless, these features are well known in the art and it would have been an obvious

modification of the system disclosed by Knauerhase et al. (USPN 6,345,303).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Knauerhase et al. (USPN 6,345,303) by employing the use of churn rate as a selection parameter. This benefits the system by giving a quantitative measurement of storage capacity that can be ranked.

29.   Regarding claim 24, although the system disclosed by Knauerhase et al. (USPN 6,345,303) (as applied to claim 16) shows substantial features of the claimed invention, it fails to disclose means wherein storage capacity comprises a churn rate.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Knauerhase et al. (USPN 6,345,303).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Knauerhase et al. (USPN 6,345,303) by employing the use of churn rate as a selection parameter. This benefits the system by giving a quantitative measurement of storage capacity that can be ranked.

Conclusion

30.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see the following:

      a. Ahuja (USPN 6,175,869)

      b. Gifford (USPN 6,052,718)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Parton whose telephone number is (703)306-0543. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Glenton Burgess can be reached on (703)305-4792. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Parton
Examiner
Art Unit 2153

ksp

GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100